Rule 1.7. Indiana Electrical Code, 2005 Edition

675 IAC 17-1.7-1 Adoption by reference

Authority: IC 22-13-2-2; IC 22-13-2-13

Affected: IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 1. That certain document, being titled as National Electrical Code, 2005 edition, first printing, and errata to the first printing (errata dated December 24, 2004), published by the National Fire Protection Association, One Batterymarch Park, Quincy, Massachusetts 02269, is hereby incorporated by reference and made a part of the rule, except those portions as are amended and adopted in sections 3 through 26 of this rule. (*Fire Prevention and Building Safety Commission; 675 IAC 17-1.7-1; filed Oct 21, 2005, 1:50 p.m.: 29 IR 811*)

675 IAC 17-1.7-2 Title; availability

Authority: IC 22-13-2-2; IC 22-13-2-13

Affected: IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

- Sec. 2. (a) This rule shall be known as the Indiana Electrical Code, 2005 edition, and shall be published, except for incorporated documents, by the fire and building services department for general distribution and use under the title. Whenever the term Anis code used within this rule, including incorporated documents, it shall mean the Indiana Electrical Code.
- (b) This rule, with the incorporated National Electrical Code, 2005 edition, is available for review and reference at the Fire and Building Services Department, 402 West Washington Street, Room W246, Indianapolis, Indiana 46204. (*Fire Prevention and Building Safety Commission; 675 IAC 17-1.7-2; filed Oct 21, 2005, 1:50 p.m.: 29 IR 812*)

675 IAC 17-1.7-3 Section 90.2; scope

Authority: IC 22-13-2-2; IC 22-13-2-13

Affected: IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

- Sec. 3. SECTION 90.2 is amended to read as follows: (A) Covered. This code covers: Installations of electric conductors and equipment within or on Class 1 and Class 2 structures, including industrialized building systems, and other premises wiring covered by rules of the commission in this title.
- (B) Class 1 and Class 2 structures covered by the Indiana Residential Code shall be made to comply with the provisions of this code or the electrical provisions of the Indiana Residential Code (675 IAC 14).

Not covered. This code does not cover:

- (1) Installations in ships, watercraft, railway rolling stock, aircraft, automotive vehicles, and buildings or structures that are not Class 1 or Class 2 structures.
- (2) Installations in underground mines.
- (3) Installations of railways for generation, transformation, transmission, or distribution of power used exclusively for operation of rolling stock or installations used exclusively for signaling and communication purposes.
- (4) Installations of communication equipment under the exclusive control of communication utilities, located outdoors or in building spaces used exclusively for such installations.
- (5) Installations, including associated lighting under the exclusive control of electric utilities for the purpose of communication, or metering; or for the generation, control, transformation, transmission, and distribution of electric energy located in buildings used exclusively by utilities for such purposes or located outdoors on property owned or leased by the utility or on public highways, streets, roads, etc., or outdoors on private property by established rights such as easements.
- (6) Installations of electrical wiring, equipment, and devices, factory installed in manufactured homes under the authority of the U.S. Department of Housing and Urban Development (HUD).

(Fire Prevention and Building Safety Commission; 675 IAC 17-1.7-3; filed Oct 21, 2005, 1:50 p.m.: 29 IR 812)

675 IAC 17-1.7-4 Section 90.4; enforcement

Authority: IC 22-13-2-2; IC 22-13-2-13

Affected: IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 4. SECTION 90.4 is amended to read as follows: Requirements covering enforcement, granting of variances, and

approval of alternate methods or materials are covered in Indiana statutes and 675 IAC 12, the General Administrative Rules of the commission. (Fire Prevention and Building Safety Commission; 675 IAC 17-1.7-4; filed Oct 21, 2005, 1:50 p.m.: 29 IR 812)

675 IAC 17-1.7-5 Section 90.6; formal interpretations

Authority: IC 22-13-2-2; IC 22-13-2-13

Affected: IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 5. SECTION 90.6 is deleted in its entirety without substitution. (*Fire Prevention and Building Safety Commission*; 675 *IAC 17-1.7-5*; filed Oct 21, 2005, 1:50 p.m.: 29 IR 812)

675 IAC 17-1.7-6 Section 90.7; examination of equipment for safety

Authority: IC 22-13-2-2; IC 22-13-2-13

Affected: IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 6. SECTION 90.7 is deleted in its entirety without substitution. (Fire Prevention and Building Safety Commission; 675 IAC 17-1.7-6; filed Oct 21, 2005, 1:50 p.m.: 29 IR 812)

675 IAC 17-1.7-7 Section 90.8; wiring planning

Authority: IC 22-13-2-2; IC 22-13-2-13

Affected: IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 7. SECTION 90.8 is deleted in its entirety without substitution. (Fire Prevention and Building Safety Commission; 675 IAC 17-1.7-7; filed Oct 21, 2005, 1:50 p.m.: 29 IR 812)

675 IAC 17-1.7-8 Section 90.9; units of measurement

Authority: IC 22-13-2-2; IC 22-13-2-13

Affected: IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 8. Delete the text of SECTION 90.9 and substitute the following: For the purpose of this code, the measurement system is the English (U.S. customary or inch-pound) system. Compliance with the numbers shown in the inch-pound system shall constitute compliance with this code. (*Fire Prevention and Building Safety Commission*; 675 IAC 17-1.7-8; filed Oct 21, 2005, 1:50 p.m.: 29 IR 812)

675 IAC 17-1.7-9 Article 100; definitions

Authority: IC 22-13-2-2; IC 22-13-2-13

Affected: IC 22-12; IC 22-13-2-7; IC 22-13-2-11; IC 22-14-2-10; IC 22-15-2-7; IC 36-7-2-9; IC 36-8-17-9

Sec. 9. (a) In Part I of Article 100, delete the text of the definition of APPROVED and substitute to read as follows: APPROVED. Acceptance by the AUTHORITY HAVING JURISDICTION by one of the following methods:

- (1) investigation or tests conducted by recognized authorities; or
- (2) investigation or tests conducted by technical or scientific organizations; or accepted principles.

The investigation, tests, or principles shall establish that the materials, equipments, and types of construction are safe for their intended purpose.

- (b) In Part I of Article 100, delete the text of the definition of AUTHORITY HAVING JURISDICTION and substitute to read as follows: AUTHORITY HAVING JURISDICTION. The office of the state building commissioner authorized under IC 22-15-2-7; the office of the state fire marshal authorized under IC 22-14-2-10; the local building official authorized under IC 36-7-2-9 and local ordinance; the fire department authorized under IC 36-8-17-9.
- (c) In Part I of Article 100, after the definition of ISOLATED, add the definition of KITCHEN to read as follows: KITCHEN. An area used, or designated to be used, for the preparation of food.
- (d) In Part I of Article 100, delete the text of the definition of SPECIAL PERMISSION and substitute to read as follows: SPECIAL PERMISSION. A variance granted by the commission under IC 22-13-2-11 or a variance granted by a political subdivision and approved by the commission under IC 22-13-2-7(b). (Fire Prevention and Building Safety Commission; 675 IAC 17-1.7-9; filed Oct 21, 2005, 1:50 p.m.: 29 IR 813)

675 IAC 17-1.7-10 Section 110.16; spaces about electrical equipment

Authority: IC 22-13-2-2; IC 22-13-2-13

Affected: IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 10. In SECTION 110.26(A)(1)(b), delete Asy special permission and insert Asylen approved (Fire Prevention and Building Safety Commission; 675 IAC 17-1.7-10; filed Oct 21, 2005, 1:50 p.m.: 29 IR 813)

675 IAC 17-1.7-11 Section 210.5; ungrounded conductors

Authority: IC 22-13-2-2; IC 22-13-2-13

Affected: IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 11. In the first sentence of Section 210.5(C), after Alentified by ensert Ahase and (Fire Prevention and Building Safety Commission; 675 IAC 17-1.7-11; filed Oct 21, 2005, 1:50 p.m.: 29 IR 813)

675 IAC 17-1.7-12 Section 210.12; arc-fault circuit-interrupter protection

Authority: IC 22-13-2-2; IC 22-13-2-13

Affected: IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 12. Delete Section 210.12(B) without substitution. (Fire Prevention and Building Safety Commission; 675 IAC 17-1.7-12; filed Oct 21, 2005, 1:50 p.m.: 29 IR 813)

675 IAC 17-1.7-13 Section 210.63; heating, air-conditioning, and refrigeration equipment outlet

Authority: IC 22-13-2-2; IC 22-13-2-13

Affected: IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 13. At the end of the first sentence of Section 210.63, add Accated in attics and crawl spaces (Fire Prevention and Building Safety Commission; 675 IAC 17-1.7-13; filed Oct 21, 2005, 1:50 p.m.: 29 IR 813)

675 IAC 17-1.7-14 Section 215.12; ungrounded conductors

Authority: IC 22-13-2-2; IC 22-13-2-13

Affected: IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 14. In the first sentence of Section 215.12(C), after Alentified by @nsert Ahase and @(Fire Prevention and Building Safety Commission; 675 IAC 17-1.7-14; filed Oct 21, 2005, 1:50 p.m.: 29 IR 813)

675 IAC 17-1.7-15 Section 230.2; number of services

Authority: IC 22-13-2-2; IC 22-13-2-13

Affected: IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 15. (a) In the second sentence of SECTION 230.2, after Accation@insert As close as practical@

(b) In SECTION 230.2(B), special occupancies, delete Asy special permission and insert Ashen approved (Fire Prevention and Building Safety Commission; 675 IAC 17-1.7-15; filed Oct 21, 2005, 1:50 p.m.: 29 IR 813)

675 IAC 17-1.7-16 Section 250.104; bonding of piping systems and exposed structural steel

Authority: IC 22-13-2-2; IC 22-13-2-13

Affected: IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 16. (a) Change the next to last sentence of SECTION 250.104(B) to read as follows: The equipment grounding conductor for the circuit that is likely to energize the piping shall be permitted to serve as the bonding means if connected using a fixed wiring method.

(b) Add a new sentence at the end of SECTION 250.104(B) to read as follows: All metal gas piping upstream from the equipment shutoff valve(s) shall be electrically continuous. (Fire Prevention and Building Safety Commission; 675 IAC 17-1.7-16; filed Oct 21, 2005, 1:50 p.m.: 29 IR 813)

675 IAC 17-1.7-17 Table 314.16(A); metal boxes

Authority: IC 22-13-2-2; IC 22-13-2-13

Affected: IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 17. In the line for $4 \, \text{H} \, 1^{1}/_{4}$ inch round/octagonal boxes and in the column for 8AWG conductor, delete **A@**nd insert **A@** (*Fire Prevention and Building Safety Commission; 675 IAC 17-1.7-17; filed Oct 21, 2005, 1:50 p.m.: 29 IR 814*)

675 IAC 17-1.7-18 Section 334.10; uses permitted

Authority: IC 22-13-2-2; IC 22-13-2-13

Affected: IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 18. (a) Delete the text of (2) in SECTION 334.10 and substitute: (2) In any building or structure not exceeding three stories (see SECTION 362.10 for the definition of STORY).

- (a) For exposed work except as prohibited in SECTION 334.12.
- (b) Concealed within walls, floors, and ceilings except as prohibited in SECTION 334.12.
- (b) Delete the text of (3) in SECTION 334.10 and substitute: (3) In any building or structure exceeding three stories (see SECTION 362.10 for the definition of STORY), Type NM, Type NMC, and Type NMS cables shall be concealed within walls, floors, and ceilings that provide a thermal barrier of material that has at least a 15-minute finish rating identified in listings of firerated assemblies. The 15-minute-finish-rated thermal barrier shall be permitted to be used for combustible walls, floors, and ceilings, except as prohibited in SECTION 334.12.

Exception: Where the building is provided with an approved automatic sprinkler system throughout, Type NMC, and Type NMS cables are permitted to be used within walls, floors, ceilings, exposed or concealed, in buildings exceeding three stories.

(Fire Prevention and Building Safety Commission; 675 IAC 17-1.7-18; filed Oct 21, 2005, 1:50 p.m.: 29 IR 814)

675 IAC 17-1.7-19 Section 334.12; uses not permitted

Authority: IC 22-13-2-2; IC 22-13-2-13

Affected: IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 19. In SECTION 334.12(A), delete Item (2) without substitution. (Fire Prevention and Building Safety Commission; 675 IAC 17-1.7-19; filed Oct 21, 2005, 1:50 p.m.: 29 IR 814)

675 IAC 17-1.7-20 Section 334.15; unfinished basements

Authority: IC 22-13-2-2; IC 22-13-2-13

Affected: IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 20. In the third sentence of SECTION 334.15(C), delete Aermitted to be without substitution. (Fire Prevention and Building Safety Commission; 675 IAC 17-1.7-20; filed Oct 21, 2005, 1:50 p.m.: 29 IR 814)

675 IAC 17-1.7-21 Section 334.80; ampacity

Authority: IC 22-13-2-2; IC 22-13-2-13

Affected: IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 21. Delete the second paragraph of SECTION 334.80 without substitution. (Fire Prevention and Building Safety Commission; 675 IAC 17-1.7-21; filed Oct 21, 2005, 1:50 p.m.: 29 IR 814)

675 IAC 17-1.7-22 Section 362.10; uses permitted

Authority: IC 22-13-2-2; IC 22-13-2-13

Affected: IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 22. (a) Delete the first two sentences of text in SECTION 362.10 and substitute to read as follows: For the purpose of this section, a story is that portion of a building included between the upper surface of any floor and the upper surface of the floor

next above, except that the topmost story shall be that portion of a building included between the upper surface of the topmost floor and the ceiling or roof above. If the finished floor level directly above a usable or unused under-floor space is more than 6 feet above grade for more than 50 percent of the total perimeter or is more than 12 feet above grade at any point, such usable or unused under-floor space shall be considered as a story.

- (b) In Item (1), under SECTION 362.10, delete Aloors above grade@and substitute Atories@
- (c) In Item (2), under SECTION 362.10, delete Aloors above grade and substitute Atories @
- (d) In SECTION 362.10, delete the exception to Items (2) and (5) and substitute to read as follows: Where the building is provided with an approved automatic sprinkler system throughout, ENT is permitted to be used within walls, floors, and ceilings, exposed or concealed, in buildings exceeding three stories. (Fire Prevention and Building Safety Commission; 675 IAC 17-1.7-22; filed Oct 21, 2005, 1:50 p.m.: 29 IR 814)

675 IAC 17-1.7-23 Section 362.12; uses not permitted

Authority: IC 22-13-2-2; IC 22-13-2-13

Affected: IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 23. In Item (7), under SECTION 362.12, uses not permitted, add 362.10(2) to the listed sections. (Fire Prevention and Building Safety Commission; 675 IAC 17-1.7-23; filed Oct 21, 2005, 1:50 p.m.: 29 IR 814)

675 IAC 17-1.7-24 Section 406.8; wet locations

Authority: IC 22-13-2-2; IC 22-13-2-13

Affected: IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 24. (a) Delete subsection 406.8(B)(1) and the text that follows without substitution.

(b) Change subsection 406.8(B)(2) to 406.8(B)(1), change the title from Ather receptacles Axterior or interior wet locations and delete the first sentence that follows the title without substitution. (Fire Prevention and Building Safety Commission; 675 IAC 17-1.7-24; filed Oct 21, 2005, 1:50 p.m.: 29 IR 815)

675 IAC 17-1.7-25 Section 525.5; clearance to rides and attractions

Authority: IC 22-13-2-2; IC 22-13-2-13

Affected: IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 25. In the first sentence of SECTION 525.5(B), delete **A.**5 m (15 ft) and insert **A.**048 m (10 ft) (Fire Prevention and Building Safety Commission; 675 IAC 17-1.7-25; filed Oct 21, 2005, 1:50 p.m.: 29 IR 815)

675 IAC 17-1.7-26 Section 547.1; scope

Authority: IC 22-13-2-2; IC 22-13-2-13

Affected: IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 26. Change SECTION 547.1 to read as follows: The provisions of this section shall apply to the following agricultural buildings or that part of a building or adjacent areas of similar or like nature as specified in (A) and (B) below, unless the building is not a Class 1 structure. Agricultural buildings that are not Class 1 structures may be regulated by local ordinance. (Fire Prevention and Building Safety Commission; 675 IAC 17-1.7-26; filed Oct 21, 2005, 1:50 p.m.: 29 IR 815)

675 IAC 17-1.7-27 Section 550.4; general requirements

Authority: IC 22-13-2-2; IC 22-13-2-13

Affected: IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 27. Add a second sentence to SECTION 550.4(B) to read as follows: Modular homes, constructed under 675 IAC 15, Industrialized Building Systems, shall comply with the provisions of Article 545 of this code. (*Fire Prevention and Building Safety Commission*; 675 IAC 17-1.7-27; filed Oct 21, 2005, 1:50 p.m.: 29 IR 815)

675 IAC 17-1.7-28 Section 600.1; scope

Authority: IC 22-13-2-2; IC 22-13-2-13

Affected: IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 28. Delete the first sentence of SECTION 600.1 and substitute to read as follows: This section covers the installation of conductors and equipment for electric signs and outline lighting as defined in Article 100 of this code that are within or connected to Class 1 or Class 2 buildings or structures. (Fire Prevention and Building Safety Commission; 675 IAC 17-1.7-28; filed Oct 21, 2005, 1:50 p.m.: 29 IR 815)

Rule 2. Indiana Safety Code for Health Care Facilities (*Repealed*) (*Repealed by Fire Prevention and Building Safety Commission; filed Oct 6, 1987, 3:00 pm: 11 IR 787*)

Rule 3. Safety Code for Health Care Facilities (Repealed) (Repealed by Fire Prevention and Building Safety Commission; filed Mar 31, 1998, 1:50 p.m.: 21 IR 2969)

*